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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,621	03/16/2004	Richard J. Hinrichs	8474-PA01	2936
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GORDON & REES LLP 101 WEST BROADWAY SUITE 1600 SAN DIEGO, CA 92101			BROOKS, KRISTIE LATRICE	
			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/801,621	Applicant(s) HINRICHS ET AL.	
	Examiner Kristie L. Brooks	Art Unit 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-37 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election of in the reply filed on July 16, 2007 is acknowledged.
Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Status of Application

2. Claims 1-37 are pending.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 recites "A composition as in Claim 1 wherein said nutrient/protectant component comprises an antimicrobial agent, antifungal agent, nourishing agent, germicide, ethylene inhibitor, anti-oxidant or plant oils or mixtures thereof..". It is unclear as to whether every component listed is intended as a part of the nutrient/protectant component or whether the nutrient/protectant component is selected from one of the above.

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Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1-2, 4-7, and 9-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pommer et al. (US 4,863,734).

Applicant claims a composition for maintaining or prolonging the appearance of a floral or foliage display comprising a polymer latex, a nutrient/protectant component, a coating adjuvant component and the balance water, which composition maintains or prolongs said appearance upon application to surfaces of cut plants of said display.

Determination of the scope and content of the prior art

(MPEP 2141.01)

Pommer et al. teach a process for combating fungi in agriculture by employing the plant *Reynoutria sachalinensis* (see the entire article, especially the abstract and column 1 lines 4-5). The plant *Reynoutria sachalinensis* has good fungicidal action on fungi which cause damage in agriculture (see the entire article, especially column 1 lines 60-62). The use of *Reynoutria sachalinensis* is particularly interesting from combating mildews, for example in cucurbits, ornamentals and vegetables (see the entire article, especially column 1 lines 62- 64). The plant can be converted into conventional formulations such as solutions, emulsions, suspensions, powders etc. (see the entire article, especially column 2 lines 3-10). The formulations generally contain from 0.1 to 95 wt% of plant or plant extract (see the entire article, especially column 2 lines 59-61). These formulations are prepared in conventional manner, e.g. by mixing the plant with extenders, liquid, liquefied gases under pressure and/or solid carriers, with or without the use of surfactants (see the entire article, especially column 2 lines 11-15). Water may be used as an extender and suitable surfactants include non-ionic and anionic emulsifiers (see the entire article, especially column 2 lines 15-16 and 40-41). The surfactants are employed in amounts of 0.1 to 30 wt% (see the entire article, especially column 2 lines 47-49). The formulations may also contain latex polymers, such as polyvinyl alcohol and polyvinyl acetate (see the entire article, especially column 2 lines 50-53). The formulations or various applications forms of the plant may be mixed with other, active ingredients such as bactericides, insecticides, herbicides, growth regulators, plant nutrients, and fungicides (See the entire article, especially column 2 lines 62-67). Application of the formulations is in the conventional manner, e.g.

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watering, spraying, sprinkling, etc and for the treatment of plant parts (i.e. leaves, seedlings), the plant concentration in the application forms may vary within a wide range, but are generally from 2 to 0.1 wt% (see the entire article, especially column 3 lines 1-13 and examples 1-5).

Ascertainment of the difference between the prior art and the claims

(MPEP 2141.02)

Pommer et al. do not teach an exemplified formulation of maintaining or prolonging the appearance of a floral or foliage display comprising a polymer latex, a nutrient/protectant component, a coating adjuvant component and the balance water, as claimed by Applicant. Pommer et al. do not teach the concentration of the polymer latex whereas Applicant claims the polymer latex present in a concentration of 3%-30% of said composition.

Finding of prima facie obviousness

Rational and Motivation (MPEP 2142-2143)

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to make a formulation comprising a polymer latex, a nutrient/protectant component, a coating adjuvant component and the balance water.

One of ordinary skill in the art would have been motivated to do this because Pommer et al. teach the plant *Reynoutria sachalinensis*, which has good fungicidal action on fungi, in formulations useful for combating mildews, for example in cucurbits, ornamentals and vegetables. The plant may be formulated with water, surfactants, latex polymers and other active ingredients such as bactericides, plant nutrients, and fungicides. Pommer et al. do not suggest the concentration of the latex polymer use, however, it would be obvious to one of ordinary skill in the art, due to process optimization, in which one of ordinary skill in the art would have to determine what concentration would be effective to achieve successful results. Pommer et al. do not teach the composition being applied to cut plants, however, one of ordinary skill would be motivated to apply the composition to cut plants with a reasonable expectation of success because Pommer et al. suggest the composition being applied to plant parts. With regards to the recitation, maintaining or prolonging the appearance of a floral or foliage display in claims 30 and 34, it is the Examiner's position that since the method steps taught in the prior art and the instant invention as claimed are the same, i.e. the same composition is being applied to the surfaces of plants parts, maintaining or prolonging the appearance of a floral or foliage display in claims 30 and 34; and whereby following application said display retains an appearance substantially the same as its appearance at the time of said application over a prolonged period of time or the service life of said display is extended for a prolonged period of time, said service life comprising maintenance of an acceptable appearance of said display without significant onset of wilting in claim 34, would be met by such application to the plant. Therefore,

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the claimed invention would have been *prima facie obvious* to one of ordinary skill in the art at the time the invention was made because the prior art is fairly suggestive of the claimed invention.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pommer et al. (US 4,863,734) in view of Smith et al. (US 6,133,300).

Applicant claims a composition for maintaining or prolonging the appearance of a floral or foliage display comprising a polymer latex, a nutrient/protectant component, a coating adjuvant component and the balance water, which composition maintains or prolongs said appearance upon application to surfaces of cut plants of said display.

Determination of the scope and content of the prior art

(MPEP 2141.01)

Pommer et al. teach a process for combating fungi in agriculture by employing the plant *Reynoutria sachalinensis* (see the entire article, especially the abstract and column1 lines 4-5). The plant *Reynoutria sachalinensis* has good fungicidal action on fungi which cause damage in agriculture (see the entire article, especially column 1 lines 60-62). The use of *Reynoutria sachalinensis* is particularly interesting from combating mildews, for example in cucurbits, ornamentals and vegetables (see the entire article, especially column 1 lines 62- 64). The plant can be converted into

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conventional formulations such as solutions, emulsions, suspensions, powders etc. (see the entire article, especially column 2 lines 3-10). The formulations generally contain from 0.1 to 95 wt% of plant or plant extract (see the entire article, especially column 2 lines 59-61). These formulations are prepared in conventional manner, e.g. by mixing the plant with extenders, liquid, liquefied gases under pressure and/or solid carriers, with or without the use of surfactants (see the entire article, especially column 2 lines 11-15). Water may be used as an extender and suitable surfactants include non-ionic and anionic emulsifiers (see the entire article, especially column 2 lines 15-16 and 40-41). The surfactants are employed in amounts of 0.1 to 30 wt% (see the entire article, especially column 2 lines 47-49). The formulations may also contain latex polymers, such as polyvinyl alcohol and polyvinyl acetate (see the entire article, especially column 2 lines 50-53). The formulations or various applications forms of the plant may be mixed with other, active ingredients such as bactericides, insecticides, herbicides, growth regulators, plant nutrients, and fungicides (See the entire article, especially column 2 lines 62-67). Application of the formulations is in the conventional manner, e.g. watering, spraying, sprinkling, etc and for the treatment of plant parts (i.e. leaves, seedlings), the plant concentration in the application forms may vary within a wide range, but are generally from 2 to 0.1 wt% (see the entire article, especially column 3 lines 1-13 and examples 1-5).

Smith et al. teach a broad spectrum antimicrobial composition comprising a mixture of benzisothiazolin-3-one, or a salt thereof (BIT) and 1,3-bis (hydroxymethyl)-

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5,5-dimethylhydantoin (DMH) (see the entire article, especially the abstract). The antimicrobial compositions are suitable to protect against the growth of microorganisms such as fungi (see the entire article, especially column 1 lines 1-25; column 3 lines 10-30). The BIT used was Troysan™ 586 (a mixture of 1,2-benzisothiazolin-3-one and propylene) (see the entire article, especially page 5 lines 24-35).

Ascertainment of the difference between the prior art and the claims

(MPEP 2141.02)

Pommer et al. do not teach the use of the nutrient/protectant component, Troysan™ 586 (a mixture of 1,2-benzisothiazolin-3-one and propylene), as claimed by Applicant.

Finding of prima facie obviousness

Rational and Motivation (MPEP 2142-2143)

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to make a formulation comprising a polymer latex, Troysan™ 586 (a mixture of 1,2-benzisothiazolin-3-one and propylene), a coating adjuvant component and the balance water.

One of ordinary skill in the art would have been motivated to do this because Pommer et al. teach the plant *Reynoutria sachalinensis*, which has good fungicidal

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action on fungi, in formulations useful for combating mildews, for example in cucurbits, ornamentals and vegetables. The plant may be formulated with water, surfactants, latex polymers and other active ingredients such as bactericides, plant nutrients, and fungicides. Pommer et al. do not suggest the use of Troysan™ 586 (a mixture of 1,2-benzisothiazolin-3-one and propylene), however, Troysan™ 586, is a known antimicrobial used to protect against microorganisms such as fungi as suggested by Smith et al. Therefore one of ordinary skill in the art would be motivated to use Troysan™ 586 because it is an obvious variation of a bactericide or fungicide useful within compositions with antifungal/antimicrobial properties. Thus, the claimed invention would have been *prima facie obvious* to one of ordinary skill in the art at the time the invention was made because the prior art is fairly suggestive of the claimed invention.

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pommer et al. (US 4,863,734) in view of Weber et al. (US 5,163,247).

Applicant claims a composition for maintaining or prolonging the appearance of a floral or foliage display comprising a polymer latex, a nutrient/protectant component, a coating adjuvant component and the balance water, which composition maintains or prolongs said appearance upon application to surfaces of cut plants of said display.

Determination of the scope and content of the prior art

(MPEP 2141.01)

Pommer et al. teach a process for combating fungi in agriculture by employing the plant *Reynoutria sachalinensis* (see the entire article, especially the abstract and column 1 lines 4-5). The plant *Reynoutria sachalinensis* has good fungicidal action on fungi which cause damage in agriculture (see the entire article, especially column 1 lines 60-62). The use of *Reynoutria sachalinensis* is particularly interesting from combating mildews, for example in cucurbits, ornamentals and vegetables (see the entire article, especially column 1 lines 62- 64). The plant can be converted into conventional formulations such as solutions, emulsions, suspensions, powders etc. (see the entire article, especially column 2 lines 3-10). The formulations generally contain from 0.1 to 95 wt% of plant or plant extract (see the entire article, especially column 2 lines 59-61). These formulations are prepared in conventional manner, e.g. by mixing the plant with extenders, liquid, liquefied gases under pressure and/or solid carriers, with or without the use of surfactants (see the entire article, especially column 2 lines 11-15). Water may be used as an extender and suitable surfactants include non-ionic and anionic emulsifiers (see the entire article, especially column 2 lines 15-16 and 40-41). The surfactants are employed in amounts of 0.1 to 30 wt% (see the entire article, especially column 2 lines 47-49). The formulations may also contain latex polymers, such as polyvinyl alcohol and polyvinyl acetate (see the entire article, especially column 2 lines 50-53). The formulations or various applications forms of the plant may be mixed with other, active ingredients such as bactericides, insecticides, herbicides, growth

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regulators, plant nutrients, and fungicides (See the entire article, especially column 2 lines 62-67). Application of the formulations is in the conventional manner, e.g. watering, spraying, sprinkling, etc and for the treatment of plant parts (i.e. leaves, seedlings), the plant concentration in the application forms may vary within a wide range, but are generally from 2 to 0.1 wt% (see the entire article, especially column 3 lines 1-13 and examples 1-5).

Weber et al. teach an agricultural mulch comprising a fibrous cellulosic web and a latex coating useful for agricultural applications to control weeds, soil moisture and temperature (see the entire article, especially the abstract). The agricultural mulch can contain plant nutrients, antimicrobial agents, fertilizer, and/or fungicide (see the entire article specially column 2 lines 60-68). Suitable latex compositions can comprise self-crosslinking acrylic late polymers, and acrylonitrile butadiene styrene polymers (see the entire article, especially column 3 lines 57-60).

Ascertainment of the difference between the prior art and the claims

(MPEP 2141.02)

Pommer et al. do not teach the use of a latex of acrylic or methacrylic polymers, as claimed by Applicant.

Finding of prima facie obviousness

Rational and Motivation (MPEP 2142-2143)

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to make a formulation comprising a latex of acrylic or methacrylic polymers, a nutrient/protectant component, a coating adjuvant component and the balance water.

One of ordinary skill in the art would have been motivated to do this because Pommer et al. teach the plant *Reynoutria sachalinensis*, which has good fungicidal action on fungi, in formulations useful for combating mildews, for example in cucurbits, ornamentals and vegetables. The plant may be formulated with water, surfactants, latex polymers and other active ingredients such as bactericides, plant nutrients, and fungicides. Pommer et al. do not suggest a latex of acrylic or methacrylic polymers however, latex polymers of acrylic or methacrylic, are known latex polymers useful within agrochemical compositions as suggested by Weber et al. Therefore one of ordinary skill in the art would be motivated to use latex acrylic or methacrylic polymers because it is an obvious variation of latex polymers useful within agrochemical compositions. Thus, the claimed invention would have been *prima facie obvious* to one of ordinary skill in the art at the time the invention was made because the prior art is fairly suggestive of the claimed invention.

Conclusion

9. No claims are allowed.


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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristie L. Brooks whose telephone number is (571) 272-9072. The examiner can normally be reached on M-F 8:30am-6:00pm Est..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann R. Richter can be reached on (571) 272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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